

Buildings Under Construction

October 2006

Fire during construction, alteration, or demolition are an ever-present threat. The fire potential is inherently greater during these operations than in the completed structure because of:

- Previous occupancy hazard and the presence of large quantities of combustible materials and debris.
- Ignition sources such as temporary heating devices, cutting/welding operations, open fires, and smoking.
- The threat of arson being greater due to the availability of combustible materials on site and the open access.

Fires can be eliminated or controlled through the early planning, scheduling, and implementation of:

- Fire prevention measures
- · Fire protection systems
- · Rapid communications
- On site security

Preparedness Checklist

- ☐ Develop a fire safety plan and appoint a responsible person to administer the plan.
- Provide a means to report a fire (such as a telephone) on site. Post the street address of the construction site adjacent to the telephone.
- Provide access to the job site for Fire Department apparatus from the start of the project through completion. The all-weather access roadway must extend to within 150' of all portions of the exterior walls of the building.
- Provide and maintain free access from the street to fire hydrants and to outside connections for standpipes, sprinklers, or other fire extinguishing equipment, whether permanent or temporary.
- ☐ Install 2A10BC fire extinguishers (or larger) in the following locations:
 - At each stairway on all floor levels
 - In every storage and construction shed
 - Where special hazards exist, including but not limited to the storage and use of flammable and combustible liquids
- ☐ Maintain extension cords free from damage, removing all damaged equipment and cords from service until rendered safe.

- ☐ Where a fire sprinkler system is to be installed, place the installation in service as soon as practicable.
- □ Provide standpipes for use during construction in buildings of 4 or more stories before construction progress is more than 40' above the lowest level of Fire Department access.
- ☐ Provide at least one temporary lighted stairway when construction extends to a height of 50' or more. Where necessary to clearly identify the exit pathway, provide appropriate exit signage.
- □ Do not allow private vehicles to be parked in buildings under construction until the fire sprinkler system is placed in service (including water flow notification) and the parking garage has been approved by the building official and fire marshal.
- □ Do not locate job shacks in buildings under construction. A job shack must be separated by not less than 20' unless the building under construction is equipped with a fire sprinkler system that has been placed in service and adequate emergency egress and ventilation have been provided.

Subject reference source is from

- Fire Safety During Construction and Demolition – Chapter 14, International Fire Code
- Standard for Safeguarding Construction, Alteration, and Demolition Operations – National Fire Protection Association (NFPA) Standard 241
- Life Safety Code Section 4.6.10 of NFPA 101

For additional clarification or information please contact

- Fire Prevention Division of the Bellevue Fire Department at 425-452-6872
- Washington State safety and health standards – Washington State Department of Labor & Industries, 1-800-547-8367 or www.lni.wa.gov.